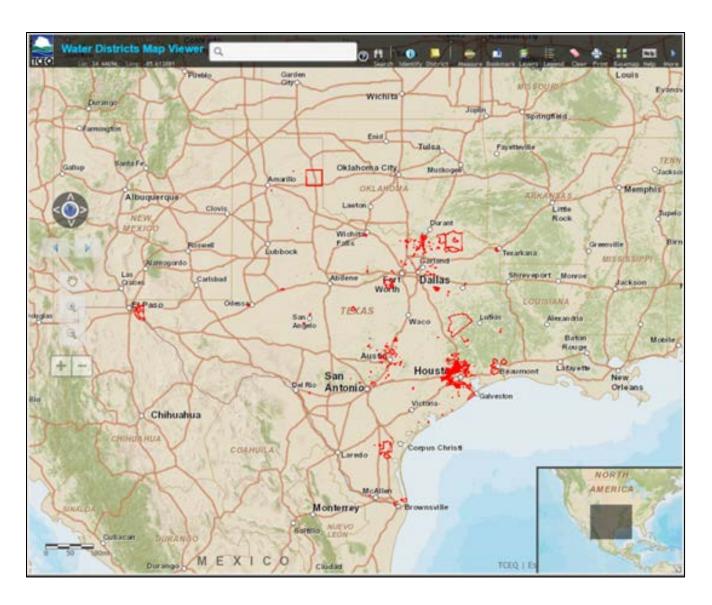
Water Districts Map Viewer – User Guide



The Water Districts Map Viewer allows users to view water district boundaries within Texas. The viewer provides search tools and bi-directional flow tool that link it to the Integrated Water Districts Database (iWDD). These tools allow users to determine if there is a district boundary within a particular area. A district is a political subdivision whose boundaries are created by either a Texas of Commission on Environmental Quality order or Texas legislative bill.

You may use the Water Districts Map Viewer to do the following:

- 1. View fifteen different district boundary layers;
- 2. Search by District name to locate district service provider(s);
- Search by address and street intersection to locate a district (must include city name and/or zip code);
- 4. Obtain details about a district service provider.

Below lists the fifteen different types of districts with their abbreviated acronyms which are displayed within the viewer:

- 1. Drainage District (DD)
- 2. Fresh Water Supply District (FWSD)
- 3. Irrigation District (ID)
- 4. Levee Improvement District (LID)
- 5. Municipal Management District (MMD)
- 6. Municipal Management District (MMD)
- 7. Navigation District (ND)
- 8. Other (OTH)
- 9. River Authority (RA)
- 10. Regional District (RD)
- 11. Storm Water Control District (SCD)
- 12. Special Utility District (SUD)
- 13. Soil & Water Conservation (SWCD)
- 14. Water Control & Improvement (WCID)
- 15. Water Improvement District (WID)

Software requirement:

The Water Districts Map Viewer has been tested and works fine in the following Web browsers:

- Microsoft Internet Explorer: Version 9 and above
- Mozilla Firefox: Version 21.0 and above
- Google Chrome: Version 30 and above

Please update your Web browsers to the newer version if some tools in the viewer do not work well for you.

The OAS/Information Resources Division (IRD)/Enterprise Support Section (ESS)/GIS Team created and maintains this application. The Water Supply Division (WSD)/ Public Drinking Water (PDW) Section/ Drinking Water Technical Review Team edits and updates their program area data, which includes water district boundaries in ArcGIS.

Date Updated: August 28, 2014

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Navigation Tools

The viewer will open to a full view of the state of Texas. As you zoom in to the map, the Municipal Utility District features will display

Basic navigation tools are provided on the left side of the screen.



Pan (Direction) Tool: Click on the arrows to move the map display in the desired direction.

Click on the **Full Extent** (globe) symbol to return to the full view of the state of Texas.



Previous Tool: Click on this button to go back to the previous map view.



Next Tool: Click on this button to return to the view you created before you click on the "Previous" tool.



Pan Tool: This tool allows you to pan over the map by dragging the display in any direction with the mouse. To use this tool, move the cursor to any desired location, hold down the left mouse button, and drag the display in any direction. (When you open the map viewer, the cursor defaults to this



function.)

Zoom In (Select) Tool: This tool allows you to zoom in on the map to a more detailed view of a selected area. The area displayed is based on the outer boundary of the box that you draw.



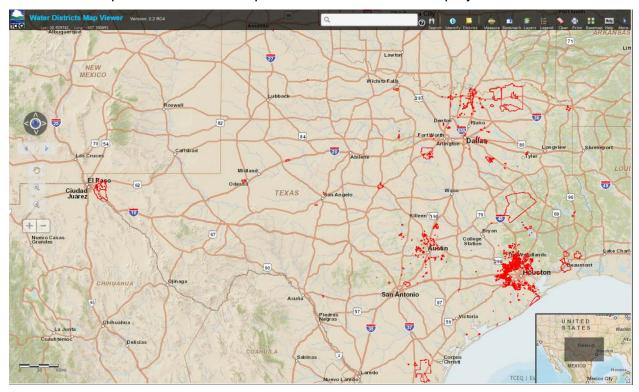
Zoom Out (Select) Tool: This tool allows you to zoom out from the area displayed on the map. The area displayed is based on the extent of the box you draw.



Zoom (Fixed) Tools: Clicking on the plus (+) sign causes the entire view to zoom in for a fixed distance. Clicking on the minus (-) sign causes the entire view to zoom out for a fixed distance. Unlike the **Zoom In/Out (Select) Tools**, you cannot specify the area you wish to zoom in and out of.

Map Extent Window

The Map Extent window is located in the lower right hand corner of the display. It displays a larger geographic area than the viewer display. The grey rectangle in the window corresponds to the area represented in the viewer display.



To change the area shown in the viewer display, click on the grey rectangle and drag it to the area of interest.

You can make the Map Extent Window appear or disappear by toggling on the arrow in the lower right hand corner of the window.

Toolbar



The toolbar at the top of the display offers multiple tools and buttons to help you navigate the view, display different district layers and download district spatial data.



Latitude-Longitude Coordinates

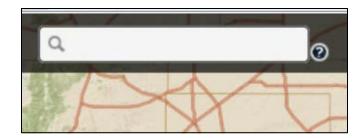
On the left side of the tool bar, the geographic coordinates for the location of the cursor are continuously displayed in decimal degrees.



Search Tool

In the center of the tool bar, the Search tool allows you to zoom to a specific location.

Clicking on the question mark (?) to the right of the search tool window opens the **How to use this Search tool?** Window; the contents are displayed below:



How to use this Search tool?

You can search a location by typing in one of following criteria in the search box (not case-sensitive).

The dropdown list will be auto-completed when you type. See examples in blue:

Note: the address search function works for the whole country. Therefore, to make the search result to be accurate, please include the city name when you search an intersection or a POI. [Point of Interest]

- Search by County Name: Travis county
- Search by City Name: Austin
- Search by Address: 1111 6th St W, Austin, TX, 78703
- Search by **Intersection:** McNeil Dr & Parmer In
- Search by Latitude/longitude: -97.2, 30.4
- Search by **POI** (**Point Of Interest: school, park, mall, hospital, etc.**): pond springs elementary



After you enter the search criteria, click on the magnifying glass in the left side of the window, OR select the auto-populated address, intersection, etc. below the search criteria you entered to execute the search.

When complete, click on the **X** in the right side of the window to clear the search.

Functional Tools

Multiple functional tools are provided on the right side of the tool bar.



M Search

This tool allows you to search for a specific Water District Name.

Clicking on this tool displays a **Search by District:** window.



To search by **District**:

- Enter the Water District Name in the space provided.
- 2. Click on the **Find Water District**button.

In this example, searching for a district with the district name of **Bammel Utility District** will yield the results displayed to the right:



To display details about any of the 15 different District Types:

- First, zoom in to the area of interest.
- Select the type of district layer you want from the dropdown menu.
- Finally, click on the desired district feature to display details about the district

Identify

This tool allows you to identify visible features on the map.

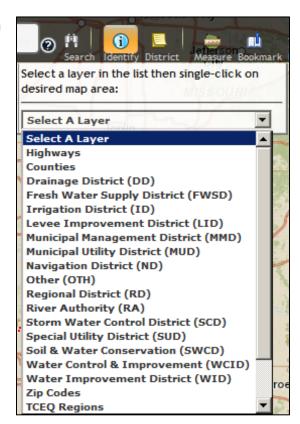
Clicking on the tool displays a menu of layers you can identify.

After you select the layer, click on the map.

The viewer will highlight the feature (point, line, or polygon) in light blue and will display an information window about the feature.

The example below displays information about TCEQ Region 11.





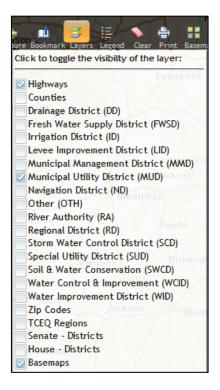
District

This tool allows you to access specific records for different types of districts.

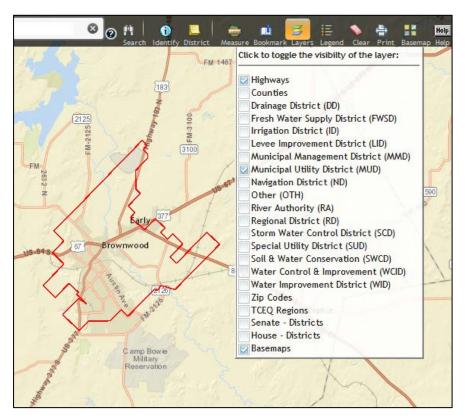
To use this tool, you must first use the **Layers** dropdown menu (described on page 15) to display the type of district you're interested in.

You must then zoom in to the area of interest until the districts appear on the viewer.

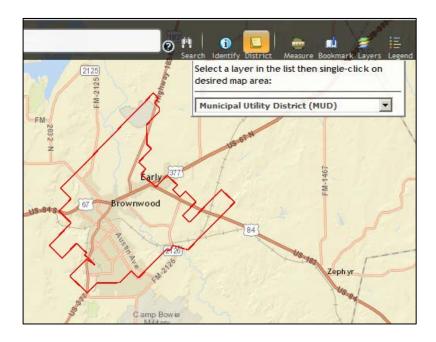
Next, use the **District** tool to specify the district you're interested in, and do a left mouse click on the specific district to display additional information about it.



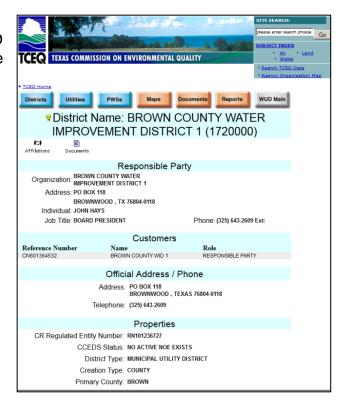
In the example to the right, we have selected **Municipal Utility District (MUD)** as the layer to display and have zoomed in to the town of Early, Texas.



The next step is to go to the **District** tool and select the **Municipal Utility District** (**MUD**) from the dropdown menu.



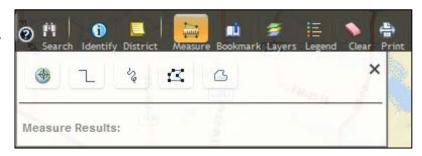
Finally, do a left mouse click within the district boundaries of Early MUD to get details about this district. The district details will be displayed in a separate web page located in iWDD.



Measure

This tool allows you to obtain latitude-longitude coordinates of point locations or measure distances in the display screen.

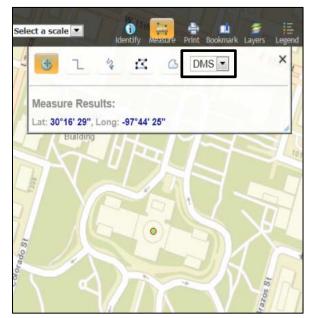
Clicking the measure tool displays a window with multiple options for measurement:



Location

This tool allows you to obtain latitude-longitude coordinates for point locations. You may choose to display latitude-longitude coordinates in decimal degrees (DD) or as degrees-minutes-seconds (DMS).





☐ Measure Distances

Use this tool to measure linear distances between point locations.

In the example to the right, the distance between Guadalupe Street and San Jacinto Boulevard on 11th Street in Austin is 0.369 miles. (You can also measure distances in yards, feet, kilometers, and meters.)

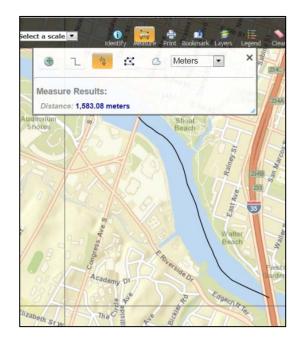
You can measure the distances of multiple connected straight lines. Make a single click at individual points, and do a double click when you're done.



Freehand

Use this tool to measure distances between two points that do not fall on a straight line.

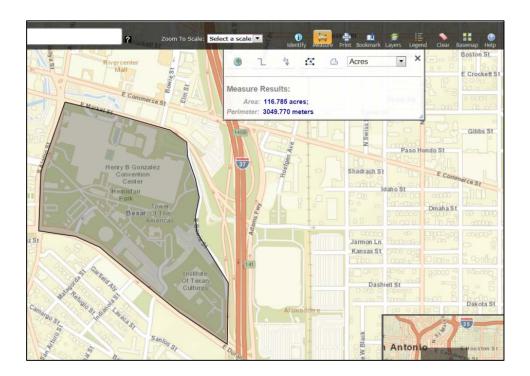
In the example to the right, the distance between South Congress Avenue and Interstate Highway 35 on Lady Bird Lake in Austin is 1,583.08 meters.



Measure an Area

Use this tool to measure the total area of a polygon (in acres, or square miles, yards, feet, kilometers, or meters).

In the example below, Hemisfair Park in San Antonio has a total area of 116.785 acres and a perimeter of 3049.770 meters.



Measure an Area (Freehand)

Use this tool to measure the total area of a freehand-drawn polygon (in acres, or square miles, yards, feet, kilometers, or meters).

Note: This tool can only be used to obtain measurements for simple polygons; if you attempt to draw a polygon with too many points, it will not provide a measurement of its area.

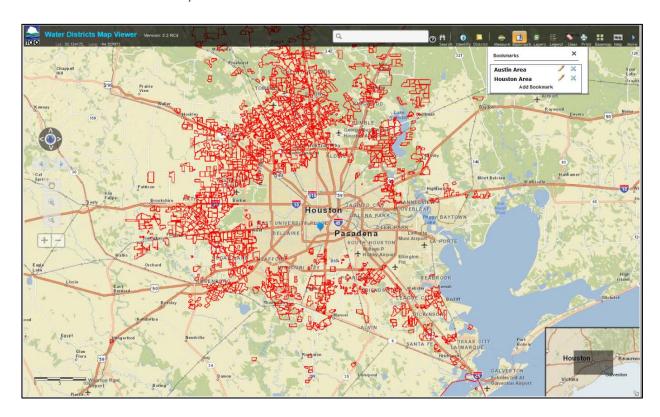
Bookmark

This tool allows you to create bookmarks for specific areas of interest, so you may return to the area of interest after you have closed the viewer. A bookmark for the Austin area is already in place (displayed below).

To create a bookmark, zoom to the area of interest and click on the **Add Bookmark** command. Enter the name of the area and hit Enter.

To edit a bookmark, click on the pencil icon and make the desired changes.

To remove a bookmark, click on the blue X.



Layers

This tool allows you to choose the layers that the viewer will display. Clicking on the box to the left of the layer name will toggle the layer on or off.

(When you open the viewer, the **Municipal Utility District** layer will already be selected.)

Note that different layers will become visible at different scales. If you select a layer but it does not display on the viewer, you may need to zoom in to a larger scale (displaying a smaller geographic area) before the layer appears.



Legend

Clicking on this tool will display the symbols for the layers you chose to display using the **Layers** tool.

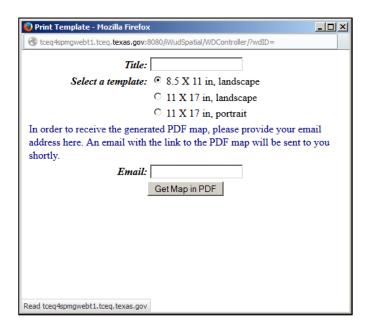
If you have selected no layers, or if you are viewing the map at a scale in which the layer does not display, clicking on the **Legend** tool will display an empty screen with the heading "No legend".

Clear

Most commonly used with the **Measure** tool, this tool removes all lines and polygons you have drawn on the viewer screen. Also, the **Clear** tool may be used to remove the results of using a tool, such as the **Buffer** tool.

Print

This tool allows you to print a map you have displayed in the viewer screen. When you click on the tool, the following window will appear:



Enter the map *Title* and your *Email* address in the spaces provided, select the template, and click on the **Get Map in PDF** button.

The viewer will send you an e-mail with the map attached in PDF format.

Basemap

Clicking on this tool brings up a window that allows you to choose from six different basemap layers:

Streets

Imagery

USGS Topographic Maps

Terrain

Light Gray Base

OpenStreetMap

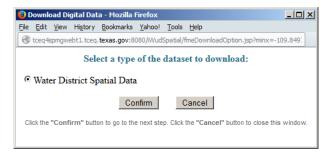


More

Clicking on the **More** arrow opens a new window with four different links:



 <u>Download Spatial Data</u> opens a window that initiates the download of CCN Spatial Data or District Spatial Data.



- Contact us opens an e-mail to: plandist@tceq.texas.gov
- Help opens a PDF copy of this User Guide.